



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assignee's Docket No.: 9380 )  
Group Art Unit: 3622 )  
Serial No.: 09/966,026 )  
Examiner: Tri V. Nguyen )  
Filing Date: September 28, 2001 )  
Title: Self-Service Terminals )  
and )  
Self-Service Networks )  
 )  
 )

**CORRECTED APPEAL BRIEF**  
A Summary of Argument Begins on Page 14

The fee for this Brief has been paid.

**CERTIFICATE OF MAILING**

I certify that this document is addressed to Mail Stop AF, Commissioner of Patents, PO Box 1450, Alexandria, VA 22313-1450, and will be deposited with the U.S. Postal Service, first class postage prepaid, on May 25, 2007.



Gregory A. Welte

**1. REAL PARTY IN INTEREST**

NCR Corporation.

**2. RELATED APPEALS AND INTERFERENCES**

None.

**3. STATUS OF CLAIMS**

Claims 1 - 29 are pending, rejected, and appealed.

09/966,026  
Art Unit 3622  
Docket no. 9380

#### **4. STATUS OF AMENDMENTS**

An amendment-after-final was submitted, and has been entered.

#### **5. SUMMARY OF CLAIMED SUBJECT MATTER**

The invention presents advertising to customers of an ATM (Automated Teller Machine), or other self service terminals.

Figure 3 shows an ATM 20. As the Specification, page 2, line 1 et seq., explains, the invention collects data describing the environment of the ATM. Block 30 in Figure 3 represents this collection process. The data is stored in a data warehouse, as block 32 in Figure 3 indicates.

The data can indicate the types of businesses in the neighborhood of the ATM. (Specification, page 7, line 22 et seq.) Consequently, one can search the data warehouse, and identify the ATMs which are located near an airport, for example. Those ATMs can be selected to display advertising for an airline. (Specification, page 3, line 8 et seq.)

Similarly, the data can indicate public events occurring near an ATM, such as a sports event. That ATM can be selected to advertise the event, during a specific time period prior to the event. (Specification, page 8, lines 17 - 23.)

In one form of the invention, the data warehouse is shared by more than one ATM network. (Specification, page 7, line 1 et seq.)

In another form of the invention, studies are undertaken to

09/966,026  
Art Unit 3622  
Docket no. 9380

assess the effectiveness of the advertising. (Specification, page 10, line 10 et seq.)

**Mapping of Claim Elements to Specification and Figures**

Parenthetical phrases, in **bold typeface**, are inserted into the following claims, to identify matter in the Specification and Figures which supports the claim language adjacent said **bold, parenthetical typeface**.

1. A method of selecting advertisements for display on or adjacent to a plurality of self- service terminals (**page 6, lines 16, 17; ATM terminal 20 in Figure 3**) comprising the steps of:

- (a) collecting environment data related to the environment of each terminal including the nature of businesses nearby the terminal (**page 7, lines 21 - 24; Figure 3, block 30**);
- (b) collecting transaction data indicating the type and time of transactions carried out at the terminal (**page 8, lines 1 - 3**); and
- (c) storing the collected data in a data warehouse (**page 8, line 10; Figure 3, block 32**).

2. A method according to claim 1, further comprising the step of:

09/966,026  
Art Unit 3622  
Docket no. 9380

(d) collecting advertising data which describes the type and content of one or more advertisement displayed on or adjacent to the terminal at particular times (page 8, lines 5 - 9; block 54, Figure 5; page 9, lines 19 - 22).

3. A method according to claim 1, wherein the plurality of terminals are distributed across more than one deployer network (page 2, lines 14, 15).

4. A method according to claim 1, wherein the data is collected and stored in real time or near real time (page 5, lines 8 - 21; page 9, line 23 - page 10, line 2; page 10, line 27; page 4, lines 5 - 7).

5. A method according to claim 2, further comprising the step of:

(e) querying the data warehouse to determine the relationship between the effectiveness of an advertisement and the terminal on or adjacent which it is displayed (page 2, line 23 - page 3, line 4).

6. A method according to claim 5, wherein the effectiveness of an advertisement is measured by determining how often the display of an advertisement on or adjacent a terminal is

09/966,026  
Art Unit 3622  
Docket no. 9380

substantially coincident with a transaction which is related to the advertising content, being initiated by a user at that terminal (page 2, line 25 - page 3, line 4).

7. A method according to claim 2, further comprising the steps of

(e) querying the data warehouse to determine which terminals are located on sites at which a selected business activity is carried out (page 3, lines 5 - 7; block 34, Figure 3; page 8, lines 17 - 23); and

(f) selecting an advertisement for display which includes content related to that business activity (page 3, lines 5 - 7; block 35, Figure 3; page 8, lines 5 - 9).

8. A method according to claim 2, further comprising the steps of:

(e) querying the data warehouse to calculate a statistical distribution of the frequency of different transactions occurring at a terminal (page 3, lines 11 - 14); and

(f) selecting an advertisement for display at the terminal dependent on the statistical distribution (page 3, lines 11 - 22).

9. A method of selecting advertisements for display on or adjacent to a plurality of self-service terminals (**page 6, lines 16, 17; ATM terminal 20 in Figure 3**) comprising the steps of:

(a) collecting environment data related to the environment of each terminal including the nature of businesses nearby the terminal (**page 7, lines 21 - 24; Figure 3, block 30**);

(b) collecting advertising data related to the type and content of one or more advertisement displayed on or adjacent to the terminal at particular times (**page 8, lines 5 - 9; block 54, Figure 5; page 9, lines 19 - 22**));

and

(c) storing the collected data in a data warehouse (**page 8, line 10; Figure 3, block 32**).

10. A method according to claim 9, wherein the plurality of terminals are distributed across more than one deployer network (**page 2, lines 14, 15**).

11. A method according to claim 9, wherein the data is collected and stored in real time or near real time (**page 10, line 27; page 8, lines 10 - 12; block 35, Figure 3; page 8, line 17 - page 9, line 4; page 4, lines 5 - 7**).

09/966,026  
Art Unit 3622  
Docket no. 9380

12. A method according to claim 9, further comprising the step of:

(d) querying the data warehouse to determine the relationship between the effectiveness of an advertisement and the terminal on or adjacent which it is displayed (page 2, line 23 - page 3, line 4).

13. A method according to claim 12, wherein the effectiveness of an advertisement is measured by determining how often the display of an advertisement on or adjacent a terminal is substantially coincident with a transaction which is related to the advertising content, being initiated by a user at that terminal (page 2, line 25 - page 3, line 4).

14. A method according to claim 9, further comprising the steps of

(d) querying the data warehouse to determine which terminals are located on sites at which a selected business activity is carried out (page 3, lines 5 - 8); and

(e) selecting an advertisement for display which includes content related to that business activity (page 3, lines 5 - 10).

09/966,026  
Art Unit 3622  
Docket no. 9380

15. A method according to claim 9, further comprising the steps of:

- (d) querying the data warehouse to calculate a statistical distribution of the frequency of different transactions occurring at a terminal (page 3, lines 11 - 14); and
- (e) selecting an advertisement for display at the terminal dependent on the statistical distribution (page 3, lines 13, 14).

16. A data warehouse operable to receive data from a network of self-service terminals (data warehouse 18 in Figure 2; page 7, lines 5 - 10) comprising:

means for holding environment data related to the environment of each terminal including its location and the nature of a business nearby the terminal (page 7, lines 21 - 24; Figure 3, block 30; page 8, line 10; Figure 3, block 32);

means for holding transaction data indicating the type and time of transactions carried out at the terminal (page 8, lines 1 - 3; page 8, line 10; Figure 3, block 32); and

the data warehouse being operable to provide information in real time or near real time for selecting

09/966,026  
Art Unit 3622  
Docket no. 9380

advertisements for display on or adjacent to one or more of the plurality of self-service terminals (page 8, lines 10 - 12; block 35, Figure 3; page 8, line 17 - page 9, line 4; page 4, lines 5 - 7).

17. A data warehouse according to claim 16, further comprising means for holding advertising data indicating the type and content of one or more advertisement displayed on and/or adjacent to the terminal at particular times (page 4, lines 3 - 7).

18. A data warehouse according to claim 17, further comprising means for determining how often the display of an advertisement on or adjacent a terminal is substantially coincident with a transaction which is related to the advertising content, being initiated by a user at that terminal (page 2, line 25 - page 3, line 4).

19. A data warehouse according to claim 16, further comprising means for determining which terminals are located on or within a predetermined distance of sites at which a selected business activity is carried out (page 8, line 17 - page 9, line 4).

09/966,026  
Art Unit 3622  
Docket no. 9380

20. A data warehouse according to claim 17, further comprising means for calculating a statistical distribution of the frequency of different transactions occurring at a terminal and selecting an advertisement for display at the terminal dependent on the statistical distribution (page 3, lines 11 - 14).

21. (Previously presented) A data warehouse according to claim 16, further comprising means for determining which transactions occur at one or more terminal within a predetermined time period of a public event or a sporting event (page 3, lines 15 - 22; page 4, lines 8 - 14; page 8, lines 17 - 23).

22. A data warehouse operable to receive data from a network of self-service terminals (**data warehouse 18 in Figure 2; page 7, lines 5 - 10**) comprising:

means for holding environment data which describes the environment of each terminal including data indicating its location or the nature of a business nearby the terminal (page 7, lines 21 - 24; Figure 3, block 30; page 8, line 10; Figure 3, block 32);

means for holding advertising data related to the type and content of one or more advertisement displayed on

09/966,026  
Art Unit 3622  
Docket no. 9380

the terminal or adjacent the terminal at particular times  
**(page 8, lines 5 - 9; block 54, Figure 5; page 9, lines 19 - 22); and**

the data warehouse being operable to provide information in real time or near real time for selecting advertisements for display on or adjacent to one or more of the plurality of self-service terminals **(page 8, lines 10 - 12; block 35, Figure 3; page 8, line 17 - page 9, line 4; page 4, lines 5 - 7).**

23. A data warehouse according to claim 22, further comprising means for determining how often the display of an advertisement on or adjacent a terminal is substantially coincident with a transaction which is related to the advertising content, being initiated by a user at that terminal **(page 2, line 23 - page 3, line 4).**

24. A data warehouse according to claim 22, further comprising means for determining which terminals are located on or within a predetermined distance of sites at which a selected business activity is carried out **(page 3, lines 5 - 10).**

25. A data warehouse according to claim 22, further comprising means for calculating a statistical distribution of the

09/966,026  
Art Unit 3622  
Docket no. 9380

frequency of different transactions occurring at a terminal and selecting an advertisement for display at the terminal dependent on the statistical distribution (page 3, lines 11 - 14).

26. A data warehouse according to claim 22, further comprising means for determining which transactions occur at one or more terminal within a predetermined time period of a public event or a sporting event (page 3, lines 15 - 22; page 4, lines 8 - 14; page 8, lines 17 - 23).

27. A self-service terminal (page 6, lines 16, 17; ATM terminal 20 in Figure 3) comprising:

display means for displaying advertising material (video screen, not labeled, in ATM terminal 20 in Figure 3; page 1, lines 8 - 10; page 5, lines 2 - 4);

network connection means for coupling the terminal to a self-service network (page 4, lines 8 - 10; page 6, line 16 - page 7, line 10; ATM netowrks 2-1 and 2-2 in Figure 1);

means for receiving commands from the network which determine what advertising content is to be displayed on the display means and at what time (page 4, lines 8 - 14; blocks 34 and 35, Figure 3); and

means for sending information to the network which

09/966,026  
Art Unit 3622  
Docket no. 9380

identifies which transactions are occurring at the terminal and at what time they occur (page 8, lines 1 - 3; page 8, line 10; Figure 3, block 32; page 4, lines 11 - 14).

28. A self-service terminal according to claim 27, further comprising means for sending information to the network which explicitly identifies what advertising material was displayed on the display means during a transaction at the terminal (page 2, lines 9 - 11; page 2, line 25 - page 3, line 4; page 4, lines 3 - 7).

29. A method of analyzing a self-service network comprising the steps of:

(a) holding in a database data describing transactions performed by a terminal in the network and advertising content displayed on or adjacent the terminal substantially at the time of the transaction (page 4, lines 17 - 19; blocks 30 and 32, Figure 3; page 8, lines 4 - 10);

(b) gathering terminal data from terminals in the network which describes transactions performed by each terminal in the network and respective advertising content displayed on or adjacent each terminal (page 4,

09/966,026  
Art Unit 3622  
Docket no. 9380

**lines 17 - 19; blocks 30 and 32, Figure 3; page 8, lines 4 - 10);**

(c) entering the terminal data into the database **(page 8, line 10; block 32, Figure 3);** and

(d) analyzing the terminal network by querying the data in the database **(block 34, Figure 3; page 8, lines 10 - 12 and lines 17 - 23).**

## **6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The rejection of claims 1, 2, 4, 7 - 9, 11, 14 - 17, 19 - 22, and 24 - 29 under 35 USC § 102, based on De Leo.

The rejection of claims 3, 5, 6, 10, 12, 13, 18, and 23 under 35 USC § 103, based on De Leo and Calvey.

## **7. ARGUMENT**

### **SUMMARY OF ARGUMENT**

#### **Claim 1**

##### **POINT 1**

Claim 1 recites "collecting environment data" which indicates "the nature of nearby businesses." That has not been shown in the sole reference, De Leo.

##### **POINT 2**

Claim 1 recites storing "environment data" (ie, data about the

09/966,026  
Art Unit 3622  
Docket no. 9380

environment of the terminal) in a data warehouse. The PTO asserts that recording the time-of-day of a transaction in De Leo shows the claimed storage of "environment data."

But time-of-day cannot be "environment data," because it does not distinguish one location (or environment) from another, in a given time zone. That is, under the PTO's reasoning, a terminal in Cincinnati would have the same "environment" as a terminal in Detroit, because both terminals are in the same time zone.

Further, the claim recites "collecting environment data." That term is simply inapplicable to De Leo's recording of the time-of-day when a transaction occurred. This is an apples-and-oranges situation. Specifically, De Leo records something like the following:

12:32 pm. 5 Jan. 2005. Smith withdrew \$ 100.

How does that indicate the "environment" of the ATM ? How is that "collecting environment data," as claimed ?

Further still, the PTO's definition renders dependent claims into nonsense. Claim 4 is an example. It states that the "data" is collected in "real time." Thus, the PTO asserts that De Leo "collects" the time-of-day in "real time." What can that mean ?

#### **Claim 7**

In Appellant's previous Amendment, Appellant requested that

09/966,026  
Art Unit 3622  
Docket no. 9380

several recitations of claim 7 be identified in De Leo.

The PTO has not responded.

MPEP § 2131 requires that every claim element be shown in the applied reference.

#### **Claim 8**

Claim 8 recites ascertaining a "statistical distribution" of transactions at a terminal.

In Appellant's previous Amendment, Appellant requested that the "statistical distribution" be identified in De Leo. In apparent response, the Final Action, page 15, states that the "statistical distribution can be understood to be 1."

At best, this response is meaningless.

The so-called "bell curve" is an example of a statistical distribution. Numerous data points are present, which form the shape of the curve. To say that such a "statistical distribution can be understood to be 1" is simply meaningless. What does the "1" signify, in the example of a bell curve ?

Further, as stated above, a "statistical distribution" is a collection of data. A **single number** ("1") cannot qualify.

Further still, the PTO is relying on the Doctrine of Inherency. That requires a technical explanation as to how "1" is implied by the reference.

Still further, even assuming that the PTO is correct, and the

09/966,026  
Art Unit 3622  
Docket no. 9380

"distribution" can be "understood" as "1," the PTO has nevertheless failed to show how this "understood" "1" shows the claim. The claim states that the "distribution" is obtained from a "query" of the "warehouse," and is used to select an "advertisement" for display at the terminal. How does "1" show that ?

#### **Claim 29**

In Appellant's previous Amendment, Appellant requested that several recitations of claim 29 be identified in De Leo.

The PTO has not responded.

MPEP § 2131 requires that every claim element be shown in the applied reference.

#### **Remaining Claims Rejected on Anticipation Grounds**

In each remaining claim, at least one claim recitation is not found in the De Leo reference.

#### **Obviousness Rejections**

##### Point 1

In every case, no valid teaching has been given for combining the references. The rationale used merely points to a feature of (or goal attained by) the combination of references. But that is not a teaching for combining the references in the first place.

If that qualifies as a teaching, then **every invention every**

09/966,026  
Art Unit 3622  
Docket no. 9380

**made** would be obvious. The reason is that every invention possesses some feature or other, or attains some goal.

Thus, the mere presence of certain features in a combination of references is insufficient to provide a teaching as required under section 103.

#### Point 2

In every case, the PTO merely asserts that certain features are present in the combination of references, or that the combination attains some goal. But no **proof** is given.

For example, as to claim 6, the PTO asserts that the combination of references is obvious because a better "estimate of efficiency of the advertising" is obtained by the combination. But no showing is made that any "estimate" is obtained which is actually "better."

The rationale is a naked conclusion. That is insufficient.

#### Point 3

In every case, the rationale for combining references is that the combination has some desirable feature, or accomplishes a desirable goal.

But that is merely a **partial description** of the combination of references. That merely **describes** certain supposed features of the combination.

09/966,026  
Art Unit 3622  
Docket no. 9380

That is not a teaching under section 103.

Point 4

For every claim, at least one claim recitation is not found in the references, even if combined.

**END SUMMARY**

**RESPONSE TO ANTICIPATION REJECTIONS**  
**CLAIMS 1, 2, 4, 7 - 9, 11, 14 - 17, 19 - 22, AND 24 - 29**

Claims 1, 2, 4, 7 - 9, 11, 14 - 17, 19 - 22, and 24 - 29 were rejected on grounds of anticipation, based on De Leo.

**Claim 1(a)**

Claim 1(a) recites

(a) collecting environment data related to the environment of each terminal including the nature of businesses nearby the terminal;

Three passages of De Leo are cited to show this:

Passage 1: column 6, lines 42 - 65;

Passage 2: column 7, line 23 - column 8, line 4; and

Passage 3: column 8, lines 24 - 43.

However, none of these Passages shows "collecting environment data" which includes "the nature of nearby businesses."

09/966,026  
Art Unit 3622  
Docket no: 9380

Passage 1 merely discusses displaying advertising on an ATM screen.

Passage 2 merely discusses steps undertaken by an ATM, and states that advertising is displayed between those steps.

Passage 3 merely states that advertising can be displayed prior to an ATM transaction. Also, Passage 3 states one way of selecting the type of advertising to be displayed.

None of the three passages discusses "collecting environment data" which includes any "nature of businesses" nearby.

MPEP § 2131 states:

A claim is anticipated only if **each and every element** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

The Final Office Action, page 13, asserts that De Leo, in column 5, lines 19 - 60, states that certain advertisements can be displayed by an ATM at specific times. The Office Action asserts that the time of day is an "environment variable" as claimed.

Appellant points out that this assertion is incorrect, for at least the following reasons.

#### Reason 1

Cincinnati and Detroit are in the same time zone, and thus have the same time-of-day at every instant. To say that this time-

09/966,026  
Art Unit 3622  
Docket no. 9380

of-day represents an "environment" of an ATM in Cincinnati is ridiculous, because that time-of-day necessarily also would represent the "environment" of Detroit, which is manifestly in a **different** "environment."

Reason 2

In the U.S., the time-of-day is identical at every location in a given time zone. Each time zone covers multiple states, and thousands of square miles.

To say that the time-of-day represents an "environment" effectively re-defines the term "environment" so as to make the term meaningless. That is, time-of-day cannot be used to distinguish one "environment" from another, in a given time zone. All the "environments" in a given time zone would be identical.

The term "environment" as used in the Specification clearly implies that **different** ATMs have **different** environments. Under the PTO's use of the term, that is not possible.

Reason 3

The claim recites "collecting environment data." That simply does not apply to the time-of-day.

Is the PTO actually asserting that De Leo "collects" time-data? If so, Appellant requests that the PTO, by way of Examiner's Answer, explain how that would be done. For example, does De Leo

09/966,026  
Art Unit 3622  
Docket no. 9380

create a file, wherein he does the following:

- At 12:00 midnight, he writes "It is midnight";
- At 12:01 am, he adds "It is 12:01 am";
- and so on ?

#### Reason 4

The PTO's definition of "environment" renders the claimed collection of data pointless. The supposed "environment" "data" (time-of-day) for every terminal in the US can be determined solely from the terminal's location. The location indicates the time zone (Eastern, Central, Mountain, Pacific, etc.). Computing the local time for each ATM then becomes trivial: a matter of addition or subtraction from the current time at the place of computation.

The PTO cannot assign a definition to a claim term which renders a claim process pointless.

#### Reason 5

The PTO's definition of "environment data" as including time-of-day renders some dependent claims as nonsense. For example, claim 4 states that the "data" is collected in "real time."

Under the PTO's definition, claim 4 now means that the time-of-day is collected in "real time." What can that possibly mean ?

09/966,026  
Art Unit 3622  
Docket no. 9380

The PTO cannot give a claim term a definition which renders other claims into nonsense.

**Claim 1(b)**

Claim 1(b) recites:

collecting transaction data indicating the type and time of transactions carried out at the terminal.

The Final Action, page 13, cites De Leo, column 8, lines 34 - 36 as showing this. However, that passage, and its context, refers to logging the times when advertising was displayed to ATM customers, so that the advertiser can be billed for the advertising.

That does not correspond to the "transactions" recited in the claim, which clearly refer to a customer's ATM transactions.

The Final Action, page 3, also cites De Leo, column 5, line 43 - column 6, line 6 as showing the claim recitation. However, that passage merely refers to a "configuration file," which De Leo defines at column 5, lines 22 - 24. The "configuration file" contains some information about a customer, and other information. That information is used to select advertising for the customer.

That does not show the claim recitation in question.

09/966,026  
Art Unit 3622  
Docket no. 9380

#### Conclusion as to Claim 1

Neither claim 1(a) nor claim 1(b) has been shown in the prior art. The rejection cannot stand.

#### Claim 2

Claim 2 recites:

2.. A method according to claim 1,  
further comprising the step of:

(d) collecting advertising data which  
describes the type and content of one or more  
advertisement displayed on or adjacent to the  
terminal at particular times.

The Office Action relies on Passages 2 and 3 (identified in the discussion of claim 1, above) to show this.

Applicant points out that claim 2, in effect, states that a **history** of the type of advertising **previously** displayed is created. Passages 2 and 3 do not show that.

#### Claim 4

Claim 4 recites "real time." That term is defined in the Specification, page 5, line 8 et seq.

Thus, in effect, claim 4 states that the "collecting" of "environment data" of claim 1 occurs when the transactions occur. This can be useful in the following example.

Suppose that a specific event is occurring near the terminal.

09/966,026  
Art Unit 3622  
Docket no. 9380

The terminal may display advertising about the event. Collection of the data, in "real time" as claimed, can assist in evaluating the effectiveness of the advertising. If an attempt to collect the data were postponed, say, for a week, then events which occurred may not be detectable at that time. Perhaps no one kept records of such events.

The Office Action relies on Passages 2 and 3, above, to show the claim. However, an examination of those Passages fails to show collection of "environment data," let alone collection in the claimed "real time."

The Office Action also relies on column 5, line 43 - column 6, line 7 of De Leo. This will be called Passage 4. However, Passage 4 merely states that

- 1) information about a customer is kept in a "configuration file," and
- 2) relevant advertising is selected for the customer based on the "configuration file."

That does not show collecting "environment data" in "real time," as claimed.

Further, De Leo does not show the basic idea behind claim 4, as illustrated by the example given above.

In Appellant's previous Amendment, Appellant specifically requested that "collecting" "environment data" "in real time" be identified in De Leo. In apparent response, the Final Action,

09/966,026  
Art Unit 3622  
Docket no. 9380

beginning on page 14, bottom, states:

. . . . De Leo . . . teaches the use of advertising targeted to specific transactions thus, the collection of data is deemed to be in "real time."

Appellant points out that this statement is a non sequitur. The conclusion does not follow, as a matter of logic, from the premise.

That is, the Final Action asserts that targeting of advertising to "specific transactions" implies that some type of data is collected in "real time." An example will illustrate the non sequitur.

De Leo states that, if a customer has an account at another bank, the ATM may offer that customer an incentive to switch banks. (Column 5, line 44 et seq.) That is targeted advertising. The customer is the target.

But there is no requirement that any information be collected in "real time," in order for that targeting to occur.

This example illustrates how advertising can be targeted, without collecting data in "real time."

Further, the claimed "data" collected in "real time" is **environment data**. Even if the PTO's assertion is correct, it does not show collection of **environment data** in "real time."

09/966,026  
Art Unit 3622  
Docket no. 9380

**Claim 7**

Point 1

The Office Action relies on three passages in De Leo to show claim 7(e) :

Passage 1 (as above): column 6, lines 42 - 65;

Passage 3 (as above): column 8, lines 24 - 43; and

Passage 5 (new): column 6, lines 7 - 22.

Claim 7(e) recites determining "which terminals are located on sites at which a selected business activity is carried out." That is not shown in any of the Passages:

-- Passage 1 merely discusses displaying advertising on an ATM screen.

-- Passage 3 merely states that advertising can be displayed prior to an ATM transaction.

Also, Passage 3 states one way of selecting the type of advertising to be displayed.

-- Passage 5 merely states how the "configuration file," discussed above, is updated at the ATM.

None of the Passages shows claim 7(e).

In Appellant's previous Amendment, Appellant specifically requested that the following be identified in De Leo:

09/966,026  
Art Unit 3622  
Docket no. 9380

- The claimed "business activity."
- The "terminals" "located" on the "sites" of that "business activity."
- The process of "identifying" those "terminals."

The PTO has not responded to this request.

Point 2

Claim 7(e) states that the "identifying" just discussed is done through a "query" on "**THE** data warehouse." "**The** data warehouse" is that recited in parent claim 1.

Thus, "data" which was collected in claim 1 is "queried" in order to "identify" "terminals" "located" on the "sites" of the selected "business activity."

In Appellant's previous Amendment, Appellant specifically requested that this operation be identified in De Leo. Appellant specifically requested that the "data warehouse" be identified.

In apparent response, the Final Action, page 15, asserts that the collection of data in De Leo implies a "data warehouse." Appellant points out that this is incorrect.

De Leo's collecting of data may imply **storage**, but **storage** can occur in numerous different ways. For example, each ATM in De Leo may store the collected data in a hard drive: one hard drive for each ATM. That is not a data "warehouse," which is a singular

09/966,026  
Art Unit 3622  
Docket no. 9380

term.

Further, the mere presence of collecting data in De Leo does not show the claim operation requested to be identified, which is here repeated:

"Data" which was collected in claim 1 is "queried" in order to "identify" "terminals" "located" on the "sites" of the selected "business activity."

The Final Action, page 15, points to claim 7(e), which states:

(e) querying the data warehouse to determine which terminals are located on sites at which a selected business activity is carried out.

(For example, the data warehouse may be queried to find which ATMs are near camera stores.)

The Final Action then asserts that this claim recitation is shown by De Leo's ATM displaying an advertisement for a "local fast food restaurant" at noon.

The PTO's assertion is simply incorrect. The parties operating the ATM and the restaurant simply decided together which ATM should display the advertisement. No "query" of a "data warehouse" has been shown.

And the overall recitation of claim 7(e) is not shown either. The overall recitation finds "terminals" (eg, ATMs) which are near specific **types** of businesses.

09/966,026  
Art Unit 3622  
Docket no. 9380

**Claim 8**

Point 1

Claim 8 recites

(e) querying the data warehouse to calculate a statistical distribution of the frequency of different transactions occurring at a terminal.

The Office Action relies on two passages in De Leo to show this recitation, namely,

Passage 5 (as above): column 6, lines 7 - 22;

and

Passage 6 (new): column 5, lines 19 - 60.

Passage 5 merely states how the "configuration file," discussed above, is updated at the ATM.

Passage 6 discusses the "configuration files" discussed above, which contain information about customers. Such files are used to select appropriate advertising for the customer.

In Appellant's previous Amendment, Appellant specifically requested that the "statistical distribution" as claimed in these Passages, be identified in De Leo. In apparent response, the Final Action, page 15, states that the "statistical distribution can be understood to be 1."

Appellant points out that this response is meaningless. A

09/966,026  
Art Unit 3622  
Docket no. 9380

bell-curve is one type of "statistical distribution." "1" is not.

Point 2

The PTO is relying on the Doctrine of Inherency. The PTO is asserting that the reference inherently shows a "distribution" of "1."

MPEP § 2112 states:

EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING TO SHOW INHERENCY.

In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teaching of the applied prior art.

The PTO has failed to show the required "basis in fact and/or technical reasoning."

Point 3

Claim 8(f) states that an advertisement is selected, based on the "statistical distribution." The Specification, page 3, line 15 et seq., provides an example:

For example, a terminal may be operable to print a map showing the location of an entertainment event occurring near the terminal.

Having calculated the statistical distribution

09/966,026  
Art Unit 3622  
Docket no. 9380

of the transactions at that terminal, it is possible to see if a statistically significant number of users are requesting the map.

It may then be appropriate to present advertising material related to the event shown on the map (to generate more requests for the map and therefore more interest in the event) or even to advertise an event of a related type (for example to sporting or tourist activities).

The related event may be operated by the same company as that for which the map is printed.

The Office Action cites part of Passage 6 to show this. However, as explained above, Passage 6 discusses a "configuration file." No "statistical distribution" as claimed is found in that file.

The Office Action also cites Passage 5. However, as explained above, Passage 5 merely states how the "configuration file," discussed above, is updated at the ATM.

The claimed "statistical distribution" has not been shown,

### **Claim 9**

The discussion of claim 1 applies to claim 9. Also, the following comments apply.

Claim 9 recites collecting data about the environment of the terminal. That has not been shown in De Leo.

Claim 9 recites, in effect, creating a history of the advertising displayed at the terminal. That has not been shown in

09/966,026  
Art Unit 3622  
Docket no. 9380

De Leo.

**Claim 11**

The discussion of claim 2 applies to claim 11.

Collecting data about the environment of the terminal in real time with transactions at the terminal has not been shown in De Leo.

**Claim 14**

The discussion of claim 7 applies to claim 14.

**Claim 15**

The discussion of claim 8 applies to claim 15.

**Claim 16**

Point 1

The discussion of claim 1 applies to claim 16. The claimed "environment data" is not found in De Leo.

Point 2

The last phrase of claim 16 states that the data is derived in "real time." Thus, a user can select advertising based on **new, current** information which was not previously contained in the data warehouse.

09/966,026  
Art Unit 3622  
Docket no. 9380

De Leo is directly contrary to this. De Leo states that advertising is selected based on the "configuration file." (Column 5, line 44 et seq.) But De Leo states that the "configuration file" is updated, and a **time delay** occurs before a new "configuration file" becomes active. (Column 6, line 7 et seq.) Specifically, De Leo states that new "configuration files" are sent out on a "periodic basis." (Column 6, line 8.)

That is directly contrary to the "real time" recitation of the claim. For example, just prior to the replacement of a "configuration file" in De Leo, the information contained in it is stale, and is not "real time" information.

#### **Claim 17**

Claim 17, in effect, recites creating a **history** of advertising displayed at the terminal. That is not found in De Leo.

The Office Action cites over 120 lines of De Leo to show claim 17. Appellant points to MPEP § 707(2), which states:

(2) In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command.

When a reference is complex or shows or describes inventions other than that claimed by the applicant, **the particular part relied on must be designated as nearly as practicable.**

The rejection fails to comply with this MPEP section.

09/966,026  
Art Unit 3622  
Docket no. 9380

**Claim 19**

The discussion of claim 7 applies to claim 19.

**Claim 20**

The discussion of claim 8 applies to claim 20.

**Claim 21**

Claim 21 recites:

determining which transactions occur at one or more terminal within a predetermined time period of [a public event].

The Office Action relies on part of Passage 6 to show this.

Appellant, in his previous Amendment, requested that the following be specifically identified in De Leo:

- the claimed "transactions" which are determined (ie, identified);
- the claimed "predetermined time;" and
- the "event."

In apparent response, the Final Action, beginning at the bottom of page 15, asserts that (1) the times of all transactions at an ATM in De Leo are recorded and (2) De Leo presents some advertisements to ATM customers at times when a movie occurs.

Appellant points out that, even if De Leo shows these two

09/966,026  
Art Unit 3622  
Docket no. 9380

items, that does not correspond to the claim. The claim refers to

- 1) an "event,"
- 2) a time-window around the event, and
- 3) determining which "transactions" at the ATM occur in the window.

The items cited in De Leo simply do not show this.

Further, item (2) of the Final Action (De Leo presents some advertisements to ATM customers at times when a movie occurs) is not actually present in De Leo. At least the undersigned attorney cannot find it, and the PTO has **NOT** cited line-and-column.

Appellant specifically requests that the PTO identify the passage where De Leo states that his ATM advertising coincides with a public event.

#### **Claim 22**

The discussion of claim 1 applies to claim 22. Specifically, no "environment data" as claimed is seen in De Leo.

#### **Claim 24**

The discussion of claim 7 applies to claim 24.

#### **Claim 25**

The discussion of claim 8 applies to claim 25.

09/966,026  
Art Unit 3622  
Docket no. 9380

**Claim 26**

The discussion of claim 21 applies to claim 26.

**Claim 27**

Claim 27 recites:

means for sending information to the network which identifies which transactions are occurring at the terminal and at what time they occur.

Point 1

The Office Action cites over 125 lines of De Leo, in order to show this simple recitation. Applicant cannot locate this recitation, or anything suggesting it, in those cited lines.

Applicant points to MPEP § 707(2), which is repeated here:

(2) In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command.

When a reference is complex or shows or describes inventions other than that claimed by the applicant, **the particular part relied on must be designated as nearly as practicable.**

Point 2

De Leo states that a "host computer" controls the ATM. (Column 3, line 31 et seq.) Therefore, the "host" already knows what transactions are occurring at the ATM. Consequently, there

09/966,026  
Art Unit 3622  
Docket no. 9380

is no reason for the ATM to transmit the claimed "information" to the host.

This leads to the inference that De Leo does not show the claim recitation.

#### **Claim 28**

##### Point 1

The discussion of claim 27 applies to claim 28. De Leo states that "message processor 28" (at the "host" - see De Leo's Figure 1) sends "non-transaction messages" (eg, advertising) to the ATM. (Column 3, line 39 et seq.)

Thus, the "host" knows what advertising is displayed at the ATM. Consequently, there is no reason for the ATM to transmit the claimed "information" to the host.

This leads to the inference that De Leo does not show the claim recitation.

##### Point 2

Parent claim 27 states that the terminal sends information about "transactions" which occur. Thus, claims 27 and 28 together state that the terminal sends information about the "transactions" and also about the "advertising" displayed during the transactions.

That is not seen in De Leo.

09/966,026  
Art Unit 3622  
Docket no. 9380

**Claim 29**

The discussion of claims 27 and 28 apply to claim 29.

In addition, claim 29 recites:

(d) analyzing the terminal network by querying the data in the database.

The Office Action cites numerous passages in De Leo as showing this recitation. However, the undersigned attorney cannot find

- 1) querying a database which contains information about transactions at terminals, together with
- 2) advertising displayed in connection with those transactions.

Appellant, in his previous Amendment, requested that the following be identified in De Leo:

- the claimed "database;"
- the claimed data, stored in the database, about "transactions" and the "advertising" displayed with those "transactions;" and
- the claimed "querying."

The PTO has not responded.

**RESPONSE TO OBVIOUSNESS REJECTIONS**  
**Claims 3, 5, 6, 10, 12, 13, 18, and 23**

Claims 3, 5, 6, 10, 12, 13, 18, and 23 were rejected as

09/966,026  
Art Unit 3622  
Docket no. 9380

obvious, based on De Leo and Calvey.

### Claim 3

Claim 3 recites:

3. A method according to claim 1, wherein the plurality of terminals are distributed across more than one deployer network.

De Leo is cited to show parent claim 1, and Calvey is cited to show claim 3.

#### Even if References are Combined, Claim 3 is not Attained - Part 1

The cited passages of Calvey (page 1, paragraphs 3 and 4) merely show two "deployer networks" (one owned by Visa International, and one owned by BankAmerica.)

But claim 3 states that the terminals in **both "deployer networks"** perform the actions of claim 1. Calvey does not state that the terminals in both networks perform those actions of claim 1.

Nor does Calvey state that the terminals in both networks perform similar actions. And it would be reasonable to assume that those terminals perform **different** actions, since they would be programmed by different programmers.

To repeat: Calvey merely points to two different networks.

09/966,026  
Art Unit 3622  
Docket no. 9380

The existence of two different networks does not show claim 3.

Therefore, even if the references are combined, this aspect of the claim is missing.

Even if References are Combined,  
Claim 3 is not Attained - Part 2

Parent claim 1 recites a **single** "data warehouse." Dependent claim 3 states that data from terminals in "more than one deployer network" is collected. Under the language of the claims, that data is placed into the (single) "data warehouse."

That has not been shown in the references, even if combined.

No Teaching Given

No valid teaching has been given in favor of combining the references.

The rationale given is that the combination "[reaches] a greater audience of users that frequent different deployer networks." However, several problems exist in this rationale.

PROBLEM 1

No evidence has been given in support of the rationale. That is, prior to the combination of references, a certain number of ATMs are present, and a certain number of customers are present.

After the combination, the same number of ATMs are present,

09/966,026  
Art Unit 3622  
Docket no. 9380

and the same number of customers are present.

No evidence has been given showing that a "greater audience of users" has been reached.

Without evidence, the rationale is a naked conclusion, which is not allowed.

#### PROBLEM 2

No basis of comparison has been given. Thus, it cannot be determined whether the rationale is correct.

That is, the rationale asserts that a "greater audience" is reached. Appellant asks: "Greater than what?"

A basis of comparison is required, in order to determine whether the rationale is correct.

#### PROBLEM 3

The rationale does not, as a matter of logic, lead to a combination of the references.

Calvey discusses two ATM networks. It seems plain that those two networks, together, "reach" a larger "audience" than either network by itself. Thus, if the goal is to reach a larger audience with ATMs, then all you need do is add more ATM networks.

De Leo's system is not needed to add more ATM networks.

Thus, the rationale does not, as a matter of logic, lead to a combination of the references. De Leo is not needed to reach a

09/966,026  
Art Unit 3622  
Docket no. 9380

greater audience.

Restated: the rationale's goal is to reach a larger audience. But that goal can be attained without the claimed invention, and without the combination of references. Thus, pursuit of the goal does not lead to the claimed invention.

#### PROBLEM 4

The rationale merely describes a supposed characteristic of the references, but **after being combined**. That is not a teaching for combining the references in the first place.

MPEP § 706.02(j) requires a teaching:

#### Contents of a 35 U.S.C. 103 Rejection

. . . After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action:

. . .

(D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification.

To establish a *prima facie* case of obviousness, three basic criteria must be met.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

. . .

09/966,026  
Art Unit 3622  
Docket no. 9380

**The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure.**

The rationale used to combine the references has not been shown in the prior art, as required by this MPEP section.

#### PROBLEM 5

Even if the PTO's rationale be accepted (ie, the goal is to reach a "greater audience"), no logical connection leading to the combination of references has been given.

That is, you can reach a "greater audience" by simply adding more ATMs to De Leo's system. You need not use "more than one deployer network" as claimed.

#### PROBLEM 6

No expectation of success has been shown, indicating that the combination of references actually works as claimed.

MPEP § 706.02(j) states:

Contents of a 35 U.S.C. 103 Rejection

To establish a *prima facie* case of obviousness, three basic criteria must be met.

09/966,026  
Art Unit 3622  
Docket no. 9380

Second, there must be a reasonable expectation of success.

. . .

The . . . reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure.

That is, parent claim 1 states that the data collected is stored in "a data warehouse," which is **singular** in number. Claim 3 states that data is collected from terminals in "more than one deployer network." Under the claim language, the "data" of claim 3 is stored in the (single) "data warehouse."

The Office Action has not shown how this is done in the combination of references. No expectation of success has been shown.

From another perspective, an element is missing. The PTO has not shown any device in the prior art which can extract data from ATMS in two different networks, and place the data into a **single** "data warehouse."

#### Claim 5

##### Even if References are Combined, Claim 5 is not Attained

Claim 5 recites querying the "data warehouse" to ascertain effectiveness of advertising at terminal(s). The Office Action has not shown this in the applied references.

The Office Action merely asserts that the references show that

09/966,026  
Art Unit 3622  
Docket no. 9380

it is well known that the effectiveness of advertising should be assessed.

But the Office Action has not shown **the particular method claimed in making the assessment** (ie, storing data from terminals in a data warehouse, and querying the warehouse.)

The recitation of claim 5 has not been shown in the prior art.

MPEP § 2143.03 states:

To establish prima facie obviousness . . . **all the claim limitations** must be taught or suggested by the prior art.

#### No Teaching Given

The rationale given for combining the references is that it is desirable to determine the efficiency of advertising, to allow for improvements.

However, that goal does not lead to the **particular method claimed**. That goal (determining effectiveness or efficiency or advertising) can be achieved by other approaches, such as surveys undertaken by poll-takers.

Thus, the rationale given does not actually lead to the claimed invention. A teaching in favor of combining the references has not been shown.

#### Combination of References not Required to Attain Goal

The Office Action postulates a goal of determining the

09/966,026  
Art Unit 3622  
Docket no. 9380

effectiveness of advertising by ATMs.

However, if one wishes to attain that goal (of determining effectiveness of advertising), there is no need to combine the references. For example, one could simply contact by mail the ATM customers in Calvey to whom coupons were issued, and ask them if they redeemed the coupons (ie, the supposed advertising). (See Calvey, page 3, paragraph 1.)

Therefore, the stated goal (of determining the effectiveness of advertising by ATMs) does not lead to a combination of references to attain that goal. Other ways to achieve the goal are possible.

#### No Expectation of Success

Again, the PTO's goal is to determine the effectiveness of advertising by ATMs. In a Calvey-example, the ATM issues discount coupons for merchants. Thus, one must ascertain how many people use the coupons.

The PTO has not shown how data is entered into the claimed "data warehouse" which would allow this ascertainment. That is, there is nothing present in the claimed "data warehouse," supposedly found in the references, which tells how many people used the coupons.

MPEP § 706.02(j), cited above, is here repeated:

09/966,026  
Art Unit 3622  
Docket no. 9380

Contents of a 35 U.S.C. 103 Rejection

To establish a *prima facie* case of obviousness, three basic criteria must be met.

Second, there must be a reasonable expectation of success.

The . . . reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure.

No expectation of success has been shown. The supposed data warehouse in the references does not contain the information needed to make the assessment postulated as a goal by the PTO.

**Claim 6**

Even if References Combined, Claim 6 is not Shown - Part 1

The Office Action cites Calvey as stating that the effectiveness of ATM advertising should be assessed.

However, claim 6 does not state that.

Claim 6 recites determining whether (1) a display of advertising is **coincident** with (2) a transaction related to the advertising.

"Coincident" refers to nearness of time.

The assessment of Calvey need not be "coincident."

09/966,026  
Art Unit 3622  
Docket no. 9380

Restated, claim 6 does not merely refer to an assessment of the effectiveness of advertising, but a **coincident** assessment.

So such coincident assessment has been shown in the references.

Even if References Combined, Claim 6 is not Shown - Part 2

Claim 6 recites determining **how often** the "coincidence" discussed above occurs.

That has not been shown in the applied references.

No Teaching Given

No valid teaching has been given for combining the references.

The rationale given is, in essence, that a better "estimate of efficiency of the advertising" is obtained. However, several problems exist in this rationale.

PROBLEM 1

No evidence has been given showing that the combination of references actually provides this "better estimate." Evidence is required.

PROBLEM 2

No basis of comparison has been given. "Better than" what ? A basis of comparison is required, to determine whether the

09/966,026  
Art Unit 3622  
Docket no. 9380

rationale is correct or not.

### PROBLEM 3

No combination of references is required to make the estimate. Calvey, by himself, discusses ATMs, and the PTO asserts that Calvey discusses the effectiveness of advertising.

Under this reasoning, De Leo is not needed to determine the effectiveness.

The PTO's rationale, as a matter of logic, does not lead to a combination of references.

### Claim 10

The discussion of claim 3 applies to claim 10.

### Claim 12

Even if References are Combined, Claim 12 is not Shown

Claim 12 recites querying the data warehouse, to determine effectiveness of advertising.

That has not been shown in the references, even if combined. Applicant points out that the "data warehouse" is that recited in parent claim 9.

MPEP § 2143.03, cited above, requires this recitation to be shown in the references. It has not been shown.

09/966,026  
Art Unit 3622  
Docket no. 9380

PTO's Rationale does not Lead to Combination of References

The PTO's rationale for combining the references is to "better estimate the efficiency of the advertisement."

However, no combination of the references is required to make that estimate. Calvey shows advertising at ATMs. The efficiency of that advertising can be estimated without De Leo, and the PTO asserts that Calvey, by himself, suggests assessing the effectiveness of advertising. There is no reason to add De Leo.

Pursuit of the stated goal does not lead to a combination of the references.

No Evidence Given

The Office Action asserts that the combination of references allows a "better estimate" to be obtained. But no evidence showing that the "estimate" is "better" has been given. Evidence is required.

Also, a standard of comparison is required. "Better" than what ?

**Claim 13**

The discussion of claim 6 applies to claim 13.

Claim 13 recites determining the frequency ("how often") of a particular coincidence. The coincidence is between (1) display of advertising and (2) a transaction relating to the advertising.

09/966,026  
Art Unit 3622  
Docket no. 9380

That has not been shown in the references.

**Claim 18**

The discussion of claim 13 applies to claim 18.

**Claim 23**

The discussion of claim 13 applies to claim 23.

**REBUTTAL OF FINAL ACTION'S "RESPONSE TO ARGUMENTS"**

The Final Action, page 14, attempts to justify the obviousness rejections. It states (center of page) that some hindsight is allowed, if the hindsight only relies on the prior-art, and not on Appellant's disclosure.

Then the Final Action states:

. . . the Examiner notes that the querying the data warehouse is a critical and obvious step

. . .

However, as explained herein, no "data warehouse," as claimed, has been shown in the cited references. The only source of (1) the **claimed** "data warehouse" and (2) the querying is Appellant's specification.

Thus, this justification of the rejections must fail.

**DOUBLE PATENTING**

09/966,026  
Art Unit 3622  
Docket no. 9380

Appellant acknowledges the provisional double patenting rejection, and will submit a terminal disclaimer, if and when required.

#### CONCLUSION

Appellant requests that the Board overturn all rejections, and pass all claims to issue.

Respectfully submitted,

  
\_\_\_\_\_  
Gregory A. Welte  
Reg. No. 30,434

NCR Corporation  
1700 South Patterson Blvd.  
WHQ - 3  
Dayton, OH 45479  
May 25, 2007  
(937) 445 - 4956

09/966,026  
Art Unit 3622  
Docket no. 9380

**9. CLAIMS APPENDIX**

1. A method of selecting advertisements for display on or adjacent to a plurality of self- service terminals comprising the steps of:

- (a) collecting environment data related to the environment of each terminal including the nature of businesses nearby the terminal;
- (b) collecting transaction data indicating the type and time of transactions carried out at the terminal; and
- (c) storing the collected data in a data warehouse.

2. A method according to claim 1, further comprising the step of:

- (d) collecting advertising data which describes the type and content of one or more advertisement displayed on or adjacent to the terminal at particular times.

3. A method according to claim 1, wherein the plurality of terminals are distributed across more than one deployer network.

4. A method according to claim 1, wherein the data is collected and stored in real time or near real time.

09/966,026  
Art Unit 3622  
Docket no. 9380

5. A method according to claim 2, further comprising the step of:

(e) querying the data warehouse to determine the relationship between the effectiveness of an advertisement and the terminal on or adjacent which it is displayed.

6. A method according to claim 5, wherein the effectiveness of an advertisement is measured by determining how often the display of an advertisement on or adjacent a terminal is substantially coincident with a transaction which is related to the advertising content, being initiated by a user at that terminal.

7. A method according to claim 2, further comprising the steps of

(e) querying the data warehouse to determine which terminals are located on sites at which a selected business activity is carried out; and  
(f) selecting an advertisement for display which includes content related to that business activity.

8. A method according to claim 2, further comprising the steps of:

(e) querying the data warehouse to calculate a

09/966,026  
Art Unit 3622  
Docket no. 9380

statistical distribution of the frequency of different transactions occurring at a terminal; and

(f) selecting an advertisement for display at the terminal dependent on the statistical distribution.

9. A method of selecting advertisements for display on or adjacent to a plurality of self-service terminals comprising the steps of:

(a) collecting environment data related to the environment of each terminal including the nature of businesses nearby the terminal;

(b) collecting advertising data related to the type and content of one or more advertisement displayed on or adjacent to the terminal at particular times; and

(c) storing the collected data in a data warehouse.

10. A method according to claim 9, wherein the plurality of terminals are distributed across more than one deployer network.

11. A method according to claim 9, wherein the data is collected and stored in real time or near real time.

12. A method according to claim 9, further comprising the step of:

09/966,026  
Art Unit 3622  
Docket no. 9380

(d) querying the data warehouse to determine the relationship between the effectiveness of an advertisement and the terminal on or adjacent which it is displayed.

13. A method according to claim 12, wherein the effectiveness of an advertisement is measured by determining how often the display of an advertisement on or adjacent a terminal is substantially coincident with a transaction which is related to the advertising content, being initiated by a user at that terminal.

14. A method according to claim 9, further comprising the steps of

(d) querying the data warehouse to determine which terminals are located on sites at which a selected business activity is carried out; and  
(e) selecting an advertisement for display which includes content related to that business activity.

15. A method according to claim 9, further comprising the steps of:

(d) querying the data warehouse to calculate a statistical distribution of the frequency of different transactions occurring at a terminal; and

09/966,026  
Art Unit 3622  
Docket no. 9380

(e) selecting an advertisement for display at the terminal dependent on the statistical distribution.

16. A data warehouse operable to receive data from a network of self-service terminals comprising:

means for holding environment data related to the environment of each terminal including its location and the nature of a business nearby the terminal;

means for holding transaction data indicating the type and time of transactions carried out at the terminal; and the data warehouse being operable to provide information in real time or near real time for selecting advertisements for display on or adjacent to one or more of the plurality of self-service terminals.

17. A data warehouse according to claim 16, further comprising means for holding advertising data indicating the type and content of one or more advertisement displayed on and/or adjacent to the terminal at particular times.

18. A data warehouse according to claim 17, further comprising means for determining how often the display of an advertisement on or adjacent a terminal is

09/966,026  
Art Unit 3622  
Docket no. 9380

substantially coincident with a transaction which is related to the advertising content, being initiated by a user at that terminal.

19. A data warehouse according to claim 16, further comprising means for determining which terminals are located on or within a predetermined distance of sites at which a selected business activity is carried out.

20. A data warehouse according to claim 17, further comprising means for calculating a statistical distribution of the frequency of different transactions occurring at a terminal and selecting an advertisement for display at the terminal dependent on the statistical distribution.

21. A data warehouse according to claim 16, further comprising means for determining which transactions occur at one or more terminal within a predetermined time period of a public event or a sporting event.

22. A data warehouse operable to receive data from a network of self-service terminals comprising:  
means for holding environment data which describes the

environment of each terminal including data indicating its location or the nature of a business nearby the terminal;

means for holding advertising data related to the type and content of one or more advertisement displayed on the terminal or adjacent the terminal at particular times; and

the data warehouse being operable to provide information in real time or near real time for selecting advertisements for display on or adjacent to one or more of the plurality of self-service terminals.

23. A data warehouse according to claim 22, further comprising means for determining how often the display of an advertisement on or adjacent a terminal is substantially coincident with a transaction which is related to the advertising content, being initiated by a user at that terminal.

24. A data warehouse according to claim 22, further comprising means for determining which terminals are located on or within a predetermined distance of sites at which a selected business activity is carried out.

25. A data warehouse according to claim 22, further

09/966,026  
Art Unit 3622  
Docket no. 9380

comprising means for calculating a statistical distribution of the frequency of different transactions occurring at a terminal and selecting an advertisement for display at the terminal dependent on the statistical distribution.

26. A data warehouse according to claim 22, further comprising means for determining which transactions occur at one or more terminal within a predetermined time period of a public event or a sporting event.

27. A self-service terminal comprising:  
display means for displaying advertising material;  
network connection means for coupling the terminal to a self-service network;  
means for receiving commands from the network which determine what advertising content is to be displayed on the display means and at what time; and  
means for sending information to the network which identifies which transactions are occurring at the terminal and at what time they occur.

28. A self-service terminal according to claim 27, further comprising means for sending information to the network which explicitly identifies what advertising material was displayed on

09/966,026  
Art Unit 3622  
Docket no. 9380

the display means during a transaction at the terminal.

29. A method of analyzing a self-service network comprising the steps of:

- (a) holding in a database data describing transactions performed by a terminal in the network and advertising content displayed on or adjacent the terminal substantially at the time of the transaction;
- (b) gathering terminal data from terminals in the network which describes transactions performed by each terminal in the network and respective advertising content displayed on or adjacent each terminal;
- (c) entering the terminal data into the database; and
- (d) analyzing the terminal network by querying the data in the database.

09/966,026  
Art Unit 3622  
Docket no. 9380

**9. EVIDENCE APPENDIX**

None.

09/966,026  
Art Unit 3622  
Docket no. 9380

**10. RELATED PROCEEDINGS APPENDIX**

None.